

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optical microscope suitable for observing several spots of an object placed in an object plane of the microscope, comprising:
 - a light source;
 - an objective; and
 - a modifiable optical transmission screen comprising zones each presenting a first passing state and a second closed state, the modifiable optical transmission screen being placed on an optical path upstream from the object and that generates in the object plane an image of the modifiable optical transmission screen coinciding substantially with the spots of the object to be observed, the spots to be observed corresponding to a structure of the object.
2. (Withdrawn) The microscope according to claim 1, wherein the modifiable optical transmission screen comprises a matrix of mirrors, each of the mirrors presenting a first position enabling a light beam from the light source to be reflected to the object and a second position enabling the light beam to be diverted from the optical path leading to the object.
3. (Previously Presented) The microscope according to claim 1, wherein the modifiable optical transmission screen comprises a matrix of liquid crystal elements, each of the liquid crystal elements presenting a first transparent state and a second opaque state.
4. (Previously Presented) The microscope according to claim 3, wherein the liquid crystal elements of the matrix of liquid crystal elements present at least a third polarising state.

5. (Withdrawn) The microscope according to claim 1, wherein the modifiable optical transmission screen is arranged directly on the object.

6. (Withdrawn) The microscope according to claim 1, wherein the object is arranged between the objective and the modifiable optical transmission screen.

7. (Previously Presented) The microscope according to claim 1, wherein the light source is formed by an array of light-emitting diodes.

8. (Previously Presented) The microscope according to claim 7, wherein the array of light-emitting diodes comprises light-emitting diodes of different colors.

9. (Previously Presented) An operating process of the optical microscope according to claim 7, comprising lighting of the object by emission of a series of light impulses at preset intervals.